

[0022] The passages 7 are formed from metal or plastic tubes 6 that extend radially or at an angle in the rotor 1. In the two embodiments eight tubes/passages are fixed between the disks/faces 2. The number may range from one tube/passage to thirty-two.

[0023] In embodiments not shown the tubes 6 and their passages 7 extend outward continuously or in steps. The tubes 6 or their passages 7 may also extend outward continuously or in steps. The tubes/passages may furthermore be assembled from individual, separate portions.

[0024] In both embodiments the rotor 1 with its tubes/passages is composed of metal and/or plastic, is supported in an enclosed chamber with gas admission and is powered by an electric motor.

We claim:

1. In an apparatus for mass transfer between a liquid and a gas inside a rotor, where

the liquid is supplied to a center of the rotor and is driven outward by centrifugal force generated by rotation of the rotor,

the gas surrounding the rotor is forced inward through the rotor by a pressure of the gas, counter to the liquid flow in the rotor, and

the rotor has a plurality of passages lying in the plane of the rotor that begin at a center of the rotor and terminate at an outer circumference of the rotor,

the improvement wherein:

the passages are each filled with a packing that increases the area of contact between the liquid and the gas.

2. The apparatus defined in claim 1, wherein the passages are formed by metal or plastic tubes extending radially or at an angle in the rotor.

3. The apparatus defined in claim 1, wherein the packings enclosed in the passages are of a woven, knitted, meshed or latticed form, and are in particular smooth or structured.

4. The apparatus defined in claim 1, wherein the packings enclosed in the passages are composed of metal, in particular formed from structured sheet metal, or of plastic or glass fibers.

5. The apparatus defined in claim 1, wherein inner ends of the passages form an inner coaxial space into which the liquid is delivered.

6. The apparatus defined in claim 1, wherein the passages are arranged in the center of the rotor in such a way that the liquid flowing through the rotor flows only through the passages.

7. The apparatus defined in claim 1, wherein outer ends of the passages terminate in the outer cylindrical annular surface of the rotor.

8. The apparatus defined in claim 1, wherein the rotor comprises one to thirty-two passages.

9. The apparatus defined in claim 1, wherein the rotor comprises two circular disks to which an axle rotation of the rotor runs perpendicular and that form a space between them in which the passages extend.

10. The apparatus defined in claim 1, wherein the passages extend outward continuously or in steps.

11. The apparatus defined in claim 2, wherein the tubes assembled from individual, separate portions.

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